- A package for an integrated circuit chip adapted 1 to operate at microwave frequencies, comprising: 2 an electrically conductive lead frame having 3 electrical leads extending outwardly from an inner region; 4 a base section adhesively affixed to a bottom 5 surface portion of the lead frame, portions of the 6 electrical leads extending outwardly from the base section; 7 a plastic cover; and 8 wherein the base section and the cover are 9 configured to provide a cavity when the cover and the base 10 section are affixed with the integrated circuit chip being 11 encapsulated within the provided cavity. 12
 - 2. The package recited in claim 1 wherein the base section comprises a dielectric member.
 - 3. The package recited in claim 2 wherein the base section includes a conductive member affixed to the dielectric member.
 - 4. The package recited in claim 1 wherein the cover has a recess disposed within sidewalls and wherein ends of the sidewalls are affixed to the base section.
 - 5. The package recited in claim 1 wherein the cover is configured to increase surface tension with an adhesive disposed between the cover and the lead frame.
 - 6. The package recited in claim 5 wherein the cover is configured with a ridge to increase the surface tension.
 - 7. The package recited in claim 1 wherein the base section is configured to increase surface tension with an

- 3 adhesive disposed between the base section and the lead
- 4 frame.
- 1 8. The package recited in claim 7 wherein the base
- 2 section is configured with a ridge to increase the surface
- 3 tension.
- 1 9. The package recited in claim 6 wherein the
- 2 adhesive projects towards an interior of the package a
- 3 distance in the order of 1% of the width of an exterior
- 4 length of the package.
- 1 10. The package recited in claim 8 wherein the
- 2 adhesive projects towards an interior of the package a
- 3 distance in the order of 1% of the width of an exterior
- 4 length of the package.
- 1 11. A method for packaging an integrated circuit
- 2 chip adapted to operate at microwave frequencies, comprising
- 3 the steps of:
- 4 providing a lead frame having: electrical leads
- 5 extending outwardly from an inner region of the lead frame;
- adhesively affixing a base section to the lead
- 7 frame with portions of the electrical leads extending
- 8 outwardly from the base;
- g connecting electrical wires between the
- 10 integrated circuit chip and the electrical leads; and
- affixing a cover to provide the package with
- 12 such integrated circuit chip being disposed within a cavity
- 13 formed by affixed cover and base section.

| 1 | 12. A method for packaging an integrated circuit |
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| 2 | chip adapted to operate at microwave frequencies, comprising |
| 3 | the steps of: |
| 4 | providing a lead frame having a plurality of |
| 5 | sites therein, each site having: electrical leads extending |
| 6 | outwardly from an inner region of the site; |
| 7 | adhesively affixing each one of a plurality of |
| 8 | plastic base section over a corresponding one of the site; |
| 9 | connecting electrical wires between the |
| 10 | integrated circuit chip at each one of the plurality of |
| 11 | sites and the electrical leads at the corresponding one of |
| 12 | the sites; and |
| 13 | adhesively affixing covers to encapsulate each |
| 14 | one of the integrated circuits and the electrical wires |
| 15 | connected thereto within a cavity formed by the |
| 16 | corresponding one of the plurality of the affixed |
| 17 | corresponding one of the covers. |
| | |
| 1 | 13. A package for an integrated circuit chip |
| 2 | adapted to operate at microwave frequencies, comprising: |
| 3 | an electrically conductive lead frame having |
| 4 | electrical leads adapted for electrical connection to the |
| 5 | integrated circuit; |
| 6 | a base section having; |
| 7 | a dielectric member; |
| 8 | a conductive member; |
| 9 | wherein the dielectric member has an |
| 10 | aperture disposed in registration with an inner region of |
| 11 | the lead frame and the conductive member has one upper |
| 12 | portion thereof adhesively affixed to a bottom potion of the |
| 13 | dielectric member and another upper portion electrically |
| 14 | connected to a bottom ground plane conductor of the |

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integrated circuit, such integrated circuit chip being 15 disposed in registration with the aperture; 16 wherein the dielectric member is disposed 17 between the lead frame and the conductive member; 18 a plastic cover; and 19 wherein the base section and the cover are 20 configured to provide a cavity when the cover and the base 21 section are affixed with the integrated circuit chip being 22 disposed with such provided cavity and with a bottom surface 23 portion of the conductive member being exposed exteriorly of 24 the package. 25

14. A method for packaging an integrated circuit chip adapted to operate at microwave frequencies, comprising the steps of:

providing a lead frame having electrical leads extending outwardly from an interior region of the lead frame;

electrically connecting a conductive member of a base section to a bottom ground plane conductor of the integrated circuit with an apertured dielectric disposed between the lead frame and the conductive member and the aperture in registration with the integrated circuit chip; connecting electrical wires between the integrated circuit chip and the electrical leads; affixing a plastic cover to provide a package

for the integrated circuit chip with such integrated circuit chip being disposed within a cavity formed by the affixed

17 cover and with a portion of the electrically conductive

18 member being exposed exteriorly of the package.

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15. A method for packaging an integrated circuit 1 chip adapted to operate at microwave frequencies, comprising 2 3 the steps of: providing a lead frame having electrical leads 4 extending outwardly from an inner region of the lead frame 5 and a dielectric member of a base section, such dielectric 6 member having an aperture; 7 connecting electrical wires between the 8 integrated circuit chip and the electrical leads and a 9 bottom ground plane conductor of the integrated circuit chip 10 to an electrically conductive member of the base section 11 with the integrated circuit chip being disposed in 12 registration with the aperture; 13 adhesively affixing the base section and a 14 cover to provide a package for the integrated circuit chip 15 with such integrated circuit chip being disposed within a 16 cavity formed by the base section and the cover and with a 17 portion of the electrically conductive member being exposed 18 exteriorly of the package. 19 A package an integrated circuit chip adapted to 1 operate at microwave frequencies, such package comprising: 2 a lead frame having electrical leads extending 3 outwardly from an inner region of the lead frame; 4 a base section having: 5 a dielectric having an aperture; 6 an electrically conductive member having 7 un upper surface adapted for electrical connection to a 8 bottom ground plane of the integrated circuit chip when the 9 integrated circuit chip is in registration with the 10 11 aperture; a dielectric cover, such cover and base section 12

being configured to provide a cavity for the integrated

- 14 circuit chip when the base section and the cover are affixed
- 15 and to expose a bottom portion of the conductive member
- 16 exteriorly of the package.